IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

SHINTANI et al.

Application No.

Unassigned

Art Unit:

Unassigned

Filed:

August 22, 2001

Examiner:

Unassigned

For:

METHOD OF FABRICATING SEMICONDUCTOR DEVICE AND WAFER

TREATMENT APPARATUS

EMPLOYED THEREFOR

AS WELL AS

SEMICONDUCTOR

DEVICE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, D.C. 20231

Pursuant to 37 CFR 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 and/or Substitute Form PTO-1449 ("Form 1449") are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form 1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form 1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.



| The In | formation Disclosure Statement is being filed: |
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| | within any one of the following time periods: (a) within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d); (b) within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 of an international application; (c) before the mailing date of a first Office Action on the merits; or (d) before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114. |
| | after (a), (b), (c) or (d) above, but before the mailing date of a final action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and includes <i>one</i> of: |
| | the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below). |
| | the fee of \$180 set forth in 37 CFR 1.17(p) (see "Fees" below). |
| | after the mailing date of a final action under 37 CFR 1.113 or a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and on or before payment of the issue fee, and includes the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below). |
| | after the mailing date of a Notice of Allowance under 37 CFR 1.311, and on or before payment of the issue fee, and within thirty days of receiving each item of information contained in the Information Disclosure Statement, and includes the Statement under 37 CFR 1.704(d) (see "Statement under 37 CFR 1.704(d)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below). NOTE: This is for original applications except applications for a design patent, filed on or after May 29, 2000, wherein a paper containing only an Information Disclosure Statement in compliance with 37 CFR 1.97 and 1.98 is being filed. |
| Copie | s of the References |
| | Copies of the references listed on the enclosed Form 1449 are enclosed herewith. Attached to each reference not in the English language is a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3). |
| | A copy of the foreign search report is enclosed herewith. |
| | The references listed on the enclosed Form 1449 were previously identified in the parent application(s) of the present application, and copies of the references were furnished at that time. Accordingly, additional copies of the references are not submitted herewith, so as not to burden the file with duplicate copies of |

references. The Examiner is respectfully requested to carefully review the references in accordance with the requirements set out in the Manual of Patent Examining Procedure. In accordance with 37 CFR 1.98(d), the details of the parent application(s) relied upon for an earlier filing date under 35 USC 120 in which copies of the references were previously furnished are set out below:

| U.S. APPLI | CATIONS | St | atus <i>(check c</i> | one) |
|-------------------|------------------|----------|----------------------|---------------|
| U.S. APPLICATIONS | U.S. FILING DATE | PATENTED | PENDING | ABANDONE D |
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| 3. | | | | | |
| Staten | nent under 37 CFI | R 1.97(e) | | | |
| | Information Disch foreign patent off | hereby states that each osure Statement was find it is in a counterpart for to the filing of the Info | irst cited in a preign patent | ny commun application | ication from a not more than |
| | Information Disclerate patent office in a the undersigned after the Information | hereby states that no osure Statement was counterpart foreign pate for making reasonable in Disclosure Statement more than three montent. | ited in a coment application inquiry, no ite was known to | munication | from a foreign e knowledge of ation contained dual designated |
| State | ment under 37 CF | R 1.704(d) | | | |
| | Information Discleration patent office in a received by any i | hereby states that each osure Statement was counterpart application andividual designated in the Information Disc | ited in a com n and that th n 37 CFR 1.5 | imunication is communi 6(c) more t | from a foreign cation was not |
| Fees | | | | | |
| | No fee is owed by The IDS Fee of \$ | the applicant(s). 180 under 37 CFR 1.17 | (p) is enclosed | l herewith. | |

| Meth | od of Payment of Fees |
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| | Attached is a check in the amount of \$. Charge Deposit Account No. 12-1216 in the amount of \$. (A duplicate copy of this communication is enclosed for that purpose.) |
| Auth | orization to Charge Additional Fees |
| | If any additional fees are owed in connection with this communication, please charge Deposit Account No. 12-1216. (A duplicate copy of this communication is enclosed for that purpose.) |
| Instr | uctions as to Overpayment |
| | Credit Account No. 12-1216. Refund |
| | Respectfully submitted, |
| | LEYDIG, VOIT & MAYER, LTD. |

Registration No. 29,458

Suite 300 700 Thirteenth Street, N. W. Washington, D. C. 20005 Telephone: (202) 737-6770 Facsimile: (202) 737-6776

Date:

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Substitute for form 1449A/B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary) Sheet

| | Complete if Known | |
|------------------------|-------------------|--|
| Application Number | Unassigned | |
| Filing Date | August 22, 2001 | |
| First Named Inventor | Shintani | |
| Group Art Unit | Unassigned | |
| Examiner Name | Unassigned | |
| Attorney Docket Number | 401352 | |

| | | | U.S | . PATENT DOCUMENTS | | |
|----------------------|----------|---------------------------------|--------------|-------------------------------|------------------------|-------------------------------|
| | | U.S. Patent Docu | | | | |
| Examiner Initials | Doc. No. | Application or Patent Number | Kind Code | Name of Patentee or Applicant | Date of Publication | Filing Date If Appropriate |
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|----------------------|----------|--------|---------------------------------|--|-------------------------------|------------------------|----------|---------|
| | | Fo | reign Patent Docume | nt | | | Trans | slation |
| Examiner Initials | Doc. No. | Office | Application or Patent Number | Kind Code | Name of Patentee or Applicant | Date of Publication | Yes | No*+ |
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| | | OTHER - NON PATENT LITERATURE DOCUMENTS | | |
|----------|-----------|--|-----|---------|
| Examiner | Doc. No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), | | slation |
| Initials | B00: 110: | publisher, city and/or country where published. | Yes | No*+ |
| - | Α1. | Watanabe et al., "Selective Etching Of Phosphosilicate Glass With Low Pressure | X | |
| | | Vapor HF", Journal of the Electrochemical Society, Volume 142, Number 1, January 1995, pages 237-243 | | |
| | A2 ; | Wong et al., "Characterization Of Wafer Cleaning And Oxide Etching Using Vapor- Phase Hydrogen Fluoride", Journal of the Electrochemical Society, Volume 138, Number 8, June 1991, pages 1799-1802 | Х | |
| | A 3 | Miki et al., "Gas-Phase Selective Etching Of Native Oxide", IEEE Transactions on Electron Devices, Volume 37, Number 1, January 1990, pages 107-115 | Х | |
| | • | | | |

| Examiner Signature | Date Considered | |
|--------------------|-----------------|--|
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A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3)

An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).